

MARKED-UP VERSION OF AMENDED CLAIMS

2. (Amended) A semiconductor device as set forth in claim [1] 7, further comprising a connection mechanism which connects the noise shield film to a power supply portion.

4. (Amended) A semiconductor device as set forth in claim [1] 7, further comprising an electrode portion provided between the first semiconductor chip and the second semiconductor chip for electrical connection between the first and second semiconductor chips, wherein the noise shield film is composed of the same material as the electrode portion.

7. (Amended) A semiconductor device [as set forth in claim 6,] comprising:
a first semiconductor chip;
a second semiconductor chip bonded onto the first semiconductor chip in
stacked relation; and

a noise shield film provided between the first semiconductor chip and the
second semiconductor chip for preventing the first and second semiconductor chips
from being mutually influenced by noises thereof,

wherein the first semiconductor chip is greater in size than the second
semiconductor chip, and the noise shield film is provided on a surface of at least the
first semiconductor chip,

wherein a major noise source is present in the second semiconductor chip,

wherein the noise shield film includes a shield portion which covers an area in which the major noise source is present, and an extension portion extending outwardly from the shield portion on a surface of the first semiconductor chip and
beyond an edge of the second semiconductor chip.

8. (Amended) A semiconductor device as set forth in claim [1] 7, wherein the noise shield film is provided in a region which covers a major noise source.

9. (Amended) A semiconductor device as set forth in claim [1] 7, wherein the first and second semiconductor chips are bonded to each other with active surfaces thereof being opposed to each other.

10. (Amended) A semiconductor device as set forth in claim [1] 7, wherein the noise shield film includes a metal film provided on a surface of at least one of the first semiconductor chip and the second semiconductor chip.

12. (Amended) A semiconductor device as set forth in claim [11] 15, wherein the heat radiator includes a heat sink.

13. (Amended) A semiconductor device [as set forth in claim 12] comprising:
a first semiconductor chip;
a second semiconductor chip bonded onto the first semiconductor chip in stacked relation;
a heat conductive member provided between the first semiconductor chip and the second semiconductor chip to define a heat release path for releasing heat generated by the second semiconductor chip; and
a connection member thermally connecting the heat conductive member to a heat radiator, the heat radiator including a heat sink, wherein the connection member includes a bonding wire which connects the heat conductive member to the heat sink.

14. (Amended) A semiconductor device as set forth in claim [11] 13, wherein the heat conductive member includes a metal film provided on a surface of at least one of the first semiconductor chip and the second semiconductor chip.

15. (Amended) A semiconductor device [as set forth in claim 14] comprising:
a first semiconductor chip;
a second semiconductor chip bonded onto the first semiconductor chip in
stacked relation;
a heat conductive member provided between the first semiconductor chip
and the second semiconductor chip to define a heat release path for releasing heat
generated by the second semiconductor chip; and
a connection member thermally connecting the heat conductive member
to a heat radiator, wherein the heat conductive member includes a metal film provided
on a surface of at least one of the first semiconductor chip and the second
semiconductor chip,
wherein the first semiconductor chip is greater in size than the second semiconductor chip,
wherein the metal film has an extension portion which extends from the vicinity of the major heat source to a surface portion of the first semiconductor chip not covered with the second semiconductor chip, and the extension portion of the metal film is thermally connected to the heat radiator via the connection member and extends
beyond an edge of the second semiconductor chip.

16. (Amended) A semiconductor device [as set forth in claim 11] comprising:
a first semiconductor chip;
a second semiconductor chip bonded onto the first semiconductor chip in
stacked relation;
a heat conductive member provided between the first semiconductor chip
and the second semiconductor chip to define a heat release path for releasing heat
generated by the second semiconductor chip; and
a connection member thermally connecting the heat conductive member
to a heat radiator,

wherein the heat conductive member includes a first metal film provided on a surface of the first semiconductor chip and a second metal film provided on a surface of the second semiconductor chip, and the first metal film and the second metal film are disposed in contact with each other or bonded to each other,

wherein the first metal film is thermally connected to the heat radiator via the connection member.

17. (Amended) A semiconductor device as set forth in claim [11] 13, further comprising an electrode portion provided between the first semiconductor chip and the second semiconductor chip for electrical connection between the first and second semiconductor chips, wherein the heat conductive member is composed of the same metal material as the electrode portion.

19. (Amended) A semiconductor device as set forth in claim [11] 13, further comprising a lead frame,

wherein the first semiconductor chip is die-bonded to the lead frame.

20. (Amended) A semiconductor device as set forth in claim [11] 13, wherein the first and second semiconductor chips are bonded to each other with active surfaces thereof being opposed to each other.

22. (Amended) A semiconductor device [as set forth in claim 21] comprising:
a first semiconductor chip;

a second semiconductor chip bonded onto the first semiconductor chip in
stacked relation; and

wherein the first semiconductor chip is greater in size than the second
semiconductor chip, and the metal film is provided on a surface of at least the first
semiconductor chip,

wherein a major noise source is present in the second semiconductor

chip,

wherein the metal film includes a shield portion which covers an area in which the major noise source is present, and an extension portion extending outwardly from the shield portion on a surface of the first semiconductor chip and beyond an edge of the second semiconductor chip

wherein the metal film is provided in a region which covers [a] the major noise source within the second semiconductor chip.

23. (Amended) A semiconductor device [as set forth in claim 21] comprising:
a first semiconductor chip;

a second semiconductor chip bonded onto the first semiconductor chip in stacked relation;

a metal film provided between the first semiconductor chip and the second semiconductor chip; and

a connection member thermally connecting the metal film to a heat radiator including a heat sink,

wherein the connection member includes a bonding wire which connects the metal film to the heat sink and,

wherein the metal film provides a heat release path for releasing heat from a major heat source within the second semiconductor chip.

24. (Amended) A semiconductor device [as set forth in claim 21] comprising:
a first semiconductor chip;

a second semiconductor chip bonded onto the first semiconductor chip in stacked relation;

a metal film provided between the first semiconductor chip and the second semiconductor chip, the metal film being provided on a surface of at least one of the first semiconductor chip and the second semiconductor chip; and

a connection member thermally connecting the heat metal film to a heat

radiator,

wherein the first semiconductor chip is greater in size than the second semiconductor chip,

wherein the metal film has an extension portion which extends to a surface portion of the first semiconductor chip not covered with the second semiconductor chip, and the extension portion of the metal film extends beyond an edge of the second semiconductor chip,

wherein the metal film is provided in a region which covers a major noise source within the second semiconductor chip, and also provides a heat release path for releasing heat from the major heat source within the second semiconductor chip.

25. (Amended) A semiconductor device [as set forth in claim 21] comprising:
a first semiconductor chip;
a second semiconductor chip bonded onto the first semiconductor chip in stacked relation;
a metal film provided between the first semiconductor chip and the second semiconductor chip to define a heat release path for releasing heat generated by the second semiconductor chip;
a connection member thermally connecting the metal film to a heat radiator; and

an electrode portion,
wherein the metal film includes a first metal film portion provided on a surface of the first semiconductor chip and a second metal film portion provided on a surface of the second semiconductor chip, and the first metal film portion and the second metal film portion are disposed in contact with each other or bonded to each other,

wherein the first metal film portion is thermally connected to the heat radiator via the connection member], further comprising an] and the electrode portion provided between the first semiconductor chip and the second semiconductor chip for

electrical connection between the first and second semiconductor chips,
wherein the metal film is composed of the same metal material as the
electrode portion.